

# United States Patent and Trademark Office

M

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/899,742 07/03/2001 Benedikt Ahlers 3198/BDR 26304 7590 01/08/2004 **EXAMINER** KATTEN MUCHIN ZAVIS ROSENMAN HANNAHER, CONSTANTINE **575 MADISON AVENUE** NEW YORK, NY 10022-2585 ART UNIT PAPER NUMBER 2878

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Art Unit: 2878

#### **DETAILED ACTION**

### **Election/Restrictions**

1. It is considered that claims 16-20, although currently written as claims dependent upon claim 1, represent a subcombination (composition of matter) upon which the combination (machine) does not rely. Any presentation of the subject matter of these claims independently will necessitate a requirement for restriction.

Page: 2

## **Priority**

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on July 3, 2000. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

#### Information Disclosure Statement

- 3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.
- 4. The information disclosure statement filed September 24, 2001 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Art Unit: 2878

Page: 3

### Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP \$\circ\$ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

It is not plainly and legibly written either by a typewriter or machine printer in permanent dark ink or its equivalent, as required under 37 CFR 1.52(a)(1)(iv).

## **Drawings**

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the AND circuit of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### **Specification**

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the AND circuit of claim 6 and "identification features" of claims 16-20.

Art Unit: 2878

Page: 4

## Claim Objections

8. Claims 4, 6, 8, and 10-20 are objected to because of the following informalities: these sheets are not in compliance with 37 CFR 1.52(a)(1)(iv) because of the handwriting thereon. Appropriate correction is required.

Substitute sheets are required within the time period for reply to this action.

- 9. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Since the sensor of claim 1 does not include any laser, the recited sensor cannot be classified into any laser class.
- 10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 7, 9, and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not describe passage through line optics of any laser source as required by independent claim 7. The balance of the claims is rejected on the basis of their dependence.

## Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2878

13. Claims 8, 12, 14, 16, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the laser focused beam" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the arrangement for proximity identification" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the laser" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the signet" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the excitation pulse" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

Art Unit: 2878

in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 1, 8, and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. (US20010035501A1) in view of Taylor (GB2342434A).

With respect to independent claim 1, Taylor *et al.* discloses a sensor of the recited type (paragraph [0046]) wherein a focused beam 11 which is emitted from a beam source 16A is converted by focusing optics 19 (paragraph [0041]) in such a manner that a scanning bar/line 28 is projected on the surface of the object 3 to be investigated with the recited activities thereon. The optical response signal 12 in the sensor of Taylor *et al.* is passed *via* detection optics 19 to an evaluation unit 6A. Although paragraph [0046] of Taylor *et al.* ("a portable testing kit") is suggestive, manual control of the sensor is not explicitly disclosed. Nevertheless, Taylor shows that manual control of a fluorescence analysis tool with a similar arrangement of bulb and lens is known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to specify that the portable testing kit of Taylor *et al.* used to determine the authenticity of manuscripts and legal documents either in whole or in part comprised a sensor under manual control as suggested by Taylor since the size and power requirements are similar and manual control would be advantageous for the applications listed by Taylor *et al.* 

With respect to dependent claim 8, as best understood since claim 1 does not require any "laser," Taylor et al. describes the focus 28 achieved by lens 19 as "diffuse" (paragraph [0041]). It would have been obvious to one of ordinary skill in the art at the time the invention was made that an astigmatic focus as recited would result in a diffuse focus 28 in the sensor of Taylor et al. (If necessary, Owens can be applied to make a "laser" obvious.)

Art Unit: 2878

With respect to dependent claim 11, the sensor of Taylor et al. integrates external light identification (paragraph [0045]) of the type recited.

With respect to dependent claim 12, as best understood since claim 1 does not require any "arrangement for proximity identification without making contact," the sensor of Taylor *et al.* integrates external light identification (paragraph [0045]). (If necessary, McWaters can be combined to make the integration into the "proximity identification" detector obvious.)

With respect to dependent claim 13, as best understood since claim 1 does not require a "laser" of any class, the capability of classification in laser class 3A would have been obvious in view of the high radiant power permitted in that class. (If necessary, Owens can be applied to make a "laser" obvious.)

With respect to dependent claim 14, as best understood since claim 1 does not require a "laser," modulation of the laser would have been obvious in view of the description by Taylor *et al.* at paragraph [0045]. (If necessary, Owens can be applied to make a "laser" obvious.)

With respect to dependent claim 15, Taylor *et al.* does not identify the f number of lens 19. A ratio of f1.0 or better would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the high light collection efficiency at that ratio which would have been recognized as useful in view of the small light source.

With respect to dependent claims 16-20, as best understood since claim 1 does not require a "signet," the sensor suggested by Taylor *et al.* and Taylor is indifferent to the nature of the identification feature on object 3 and Taylor *et al.* explicitly permits "appropriate modifications where necessary" (paragraph [0046]). In view of the wide variety of objects sought to be examined by the suggested sensor, it would have been obvious to one of ordinary skill in the art at the time the

invention was made that the luminescent identification feature(s) could be of any known type, emitting luminescence of any known nature.

17. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor *et al.* (US20010035501A1) and Taylor (GB2342434A) as applied to claim 1 above, and further in view of McWaters (US004072859A).

With respect to dependent claims 2-4, McWaters shows that a sensor with proximity identification having the recited characteristics is known. In view of the power conservation afforded by the use of proximity identification as suggested by McWaters, it would have been obvious to include such proximity identification in the sensor suggested by Taylor *et al.* and Taylor to enhance the portability.

18. Claims 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor *et al.* (US20010035501A1) and Taylor (GB2342434A) as applied to claim 1 above, and further in view of Faulkerson *et al.* (US004949391A).

With respect to dependent claims 2 and 5, Faulkerson *et al.* shows that a sensor with proximity identification having the recited characteristics is known. In view of the power conservation afforded by the use of proximity identification as suggested by Faulkerson *et al.*, it would have been obvious to include such proximity identification in the sensor suggested by Taylor *et al.* and Taylor to enhance the portability.

With respect to dependent claim 6, Faulkerson et al. shows manually operated pushbutton **26B**. Although Fig. 3 is schematic as to the interaction between proximity identification **26A** and manually operated pushbutton **26B**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a hardware equivalent for the key token signal

analysis described by Faulkerson *et al.* at column 10, lines 44-52 in the sensor suggested by Tayloer *et al.* and Taylor to enhance the portability.

19. Claims 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. (US20010035501A1) in view of Taylor (GB2342434A) and Owens (US006263584B1).

With respect to independent claim 7, Taylor et al. discloses a sensor of the recited type (paragraph [0046]) wherein the focused beam 11 which is produced on the object 3 is produced by at least one source 16A which passes through line optics 19 (paragraph [0041]). Source 16A is a bulb and Taylor recognizes that bulbs, light emitting diodes, and "any other suitable item of equipment" are of equivalent performance in an instrument similarly requiring a small, low-power source of excitation energy for fluorescence analysis. Owens shows that a small, battery-operated laser 22 which projects a line is known. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a laser source as described by Owens qualified as a "suitable item of equipment" for a document sensor, replacing the bulb 16A in the sensor of Taylor et al. since no specific motivation is required to substitute one known equivalent for another.

With respect to dependent claim 9, Taylor et al. describes the focus 28 achieved by lens 19 as "diffuse" (paragraph [0041]). It would have been obvious to one of ordinary skill in the art at the time the invention was made that an astigmatic focus as recited would result in a diffuse focus 28 in the sensor of Taylor et al.

With respect to dependent claim 10, in view of the close proximity of lens 19 to banknote 3 in the sensor of Taylor *et al.* and the preference for focus 28 to be "a strip across the note" it is considered that the largest angles of the beam 11 in the sensor of Taylor *et al.* are within the claimed range.

Art Unit: 2878

Response to Submission(s)

20. The application has been published as US2003/0030012A1 on February 13, 2003.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Yoshimura et al. (US004772125A) and Broicher et al. (US004745276A) show that laser

line scanners in general are known.

22. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Constantine Hannaher whose telephone number is (703) 308-4850. The

examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

David P. Porta can be reached on (703) 308-4852. The fax phone number for the organization

where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0956.

ch

onstantine Hannaher

Page: 10

**Primary Examiner**